MATERIAL SAFETY DATA SHEET
VDX - VDX DRY LUBRICANT SPRAY, AEROSOL

1 IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING

PRODUCT NAME
VDX - VDX DRY LUBRICANT SPRAY, AEROSOL

PRODUCT NO.
MCC-VDX

PRODUCT USE
Cleaning agent.

SUPPLIER
MICROCare CORPORATION
595 John Downey Drive
New Britain, CT 06051
United States of America
CAGE: OATV9
+1 860-827-0626
+1 860-827-8105
technical-support@microcare.com

EMERGENCY TELEPHONE
CHEMTREC (800) 424-9300

IDENTIFICATION No.
UN1950

2 HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW
White / off-white. Creamy liquid. Odor of alcohol. Aerosol. This product is not flammable. Liquid may irritate the skin. Spray and vapor in the eyes may cause irritation and smarting. No specific ventilation requirements noted, except this product must not be used in a confined space without good ventilation. Keep out of the reach of children.

PHYSICAL AND CHEMICAL HAZARDS
Vapors are heavier than air and may travel along the floor and in the bottom of containers. Considering the limited amount applied during use and the size of the container, the risk of adverse effects is considered small. Gas or vapor displaces oxygen available for breathing (asphyxiating).

HUMAN HEALTH
Prolonged skin contact may cause redness, irritation and dry skin. Mild dermatitis, allergic skin rash.

POTENTIAL HEALTH EFFECTS

INHALATION
Vapors may irritate the respiratory system and cause coughing, asthmatic breathing and breathlessness.

INGESTION
May cause stomach pain or vomiting. May cause nausea, headache, dizziness and intoxication.

SKIN CONTACT
Acts as a defatting agent on skin. May cause cracking of skin, and eczema.

EYE CONTACT
May cause temporary eye irritation.

MEDICAL SYMPTOMS
High concentrations of vapors may irritate respiratory system and lead to headache, fatigue, nausea and vomiting.

CARCINOGENICITY
This substance has no evidence of carcinogenic properties.

3 COMPOSITION/INFORMATION ON INGREDIENTS

<table>
<thead>
<tr>
<th>Name</th>
<th>EC No.</th>
<th>CAS-No.</th>
<th>Content %</th>
</tr>
</thead>
<tbody>
<tr>
<td>HFC-134a Tetrafluoroethane</td>
<td>212-377-0</td>
<td>811-97-2</td>
<td>90-100%</td>
</tr>
<tr>
<td>Poly-tfe, alpha-chloro-omega</td>
<td>79070-11-4</td>
<td></td>
<td>1-5%</td>
</tr>
<tr>
<td>Poly-tfe, omega-hydro-alpha-(methylcyclohexyl)</td>
<td>65530-85-0</td>
<td></td>
<td>1-5%</td>
</tr>
<tr>
<td>PROPAN-2-OL</td>
<td>200-661-7</td>
<td>67-63-0</td>
<td>5-10%</td>
</tr>
</tbody>
</table>
4 FIRST-AID MEASURES

GENERAL INFORMATION
Never make an unconscious person vomit or drink fluids! Place unconscious person on the side in the recovery position and ensure breathing can take place. Perform artificial respiration if breathing has stopped. Consult a physician for specific advice.

INHALATION
Remove victim immediately from source of exposure. Move into fresh air and keep at rest. If respiratory problems, artificial respiration/oxygen. Get medical attention.

INGESTION
Do not induce vomiting. If vomiting occurs, the head should be kept low so that stomach vomit doesn't enter the lungs. Do not give victim anything to drink if he is unconscious. Promptly get affected person to drink large volumes of water to dilute the swallowed chemical. Get medical attention.

SKIN CONTACT
Remove contaminated clothes and rinse skin thoroughly with water.

EYE CONTACT
Promptly wash eyes with plenty of water while lifting the eye lids. Make sure to remove any contact lenses from the eyes before rinsing. Consult a physician for specific advice.

5 FIRE-FIGHTING MEASURES

EXTINGUISHING MEDIA
This product is not flammable. Use fire-extinguishing media appropriate for surrounding materials.

SPECIAL FIRE FIGHTING PROCEDURES
Move container from fire area if it can be done without risk.

UNUSUAL FIRE & EXPLOSION HAZARDS
Aerosol containers can explode when heated, due to excessive pressure build-up.

SPECIFIC HAZARDS
Avoid contact with naked flames and hot surfaces as corrosive and toxic decomposition products can be formed.

PROTECTIVE MEASURES IN FIRE
Self contained breathing apparatus and full protective clothing must be worn in case of fire.

6 ACCIDENTAL RELEASE MEASURES

PERSONAL PRECAUTIONS
Warn everybody of potential hazards and evacuate if necessary. Ventilate well, avoid breathing vapors. Use approved respirator if air contamination is above accepted level.

ENVIRONMENTAL PRECAUTIONS
Contain spillages with sand, earth or any suitable adsorbent material. Avoid release to the environment.

SPILL CLEAN UP METHODS
Provide ventilation and confine spill. Do not allow runoff to sewer. Wear necessary protective equipment. Extinguish all ignition sources. Avoid sparks, flames, heat and smoking. Ventilate. Collect with absorbent, non-combustible material into suitable containers.

7 HANDLING AND STORAGE

HANDLING
Provide good ventilation. Avoid inhalation of vapors/spray and contact with skin and eyes. Avoid contact with naked flames and hot surfaces as corrosive and toxic decomposition products can be formed. Keep out of the reach of children.

STORAGE
Aerosol cans: Must not be exposed to direct sunlight or temperatures above 50°C.

8 EXPOSURE CONTROLS/PERSOAL PROTECTION

PROTECTIVE EQUIPMENT
VDX - VDX DRY LUBRICANT SPRAY, AEROSOL

ENGINEERING MEASURES
No specific ventilation requirements noted, except this product must not be used in a confined space without good ventilation.

RESPIRATORY EQUIPMENT
Considering the size of the packaging, the risk is regarded as minimal. Vapors are heavier than air and may travel along the floor and in the bottom of containers. At work in confined or poorly ventilated spaces, respiratory protection with air supply must be used.
Self-contained breathing apparatus with full facepiece.

HAND PROTECTION
For prolonged or repeated skin contact use suitable protective gloves. Gloves of nitrile rubber, PVA or Viton are recommended.

EYE PROTECTION
Wear approved, tight fitting safety glasses where splashing is probable.

OTHER PROTECTION
Wear suitable protective clothing as protection against splashing or contamination.

HYGIENE MEASURES
No specific hygiene procedures noted, but good personal hygiene practices are always advisable, especially when working with chemicals. When using do not eat, drink or smoke.

SKIN PROTECTION
Wear apron or protective clothing in case of splashes.

9 PHYSICAL AND CHEMICAL PROPERTIES

<table>
<thead>
<tr>
<th>APPEARANCE</th>
<th>Liquid Gas</th>
</tr>
</thead>
<tbody>
<tr>
<td>COLOR</td>
<td>White / off-white. Waxy</td>
</tr>
<tr>
<td>ODOR</td>
<td>Slight odor of alcohol.</td>
</tr>
<tr>
<td>PHYSICAL DATA COMMENTS</td>
<td>Aerosol.</td>
</tr>
<tr>
<td>VOLATILITY DESCRIPTION</td>
<td>Volatile</td>
</tr>
<tr>
<td>SOLUBILITY</td>
<td>Insoluble in water</td>
</tr>
<tr>
<td>Flammability</td>
<td>This product is not flammable.</td>
</tr>
<tr>
<td>BOILING POINT (°C)</td>
<td>-26.5 C / -15.7 F</td>
</tr>
<tr>
<td>PARTICLE SIZE (Micron)</td>
<td>1-15</td>
</tr>
<tr>
<td>VAPOR DENSITY (air=1)</td>
<td>3.18 @ 25 C / 77 F</td>
</tr>
<tr>
<td>VAPOR PRESSURE</td>
<td>4972 mm Hg 16.7 C / 62 F</td>
</tr>
<tr>
<td>VOLATILE BY VOL. (%)</td>
<td>98.5</td>
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</tbody>
</table>

10 STABILITY AND REACTIVITY

STABILITY
Stable under normal temperature conditions and recommended use.

CONDITIONS TO AVOID
Avoid contact with naked flames and hot surfaces as corrosive and toxic decomposition products can be formed.

HAZARDOUS POLYMERISATION
Will not polymerise.

MATERIALS TO AVOID
Alkali metals. Alkali earth metals. Powdered metal.

HAZARDOUS DECOMPOSITION PRODUCTS

11 TOXICOLOGICAL INFORMATION

<table>
<thead>
<tr>
<th>Name</th>
<th></th>
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</thead>
<tbody>
<tr>
<td>Toxic Dose 1 - LD 50</td>
<td>5045 mg/kg (oral rat)</td>
</tr>
<tr>
<td>Toxic Dose 2 - LD 50</td>
<td>3600 mg/kg (oral-mouse)</td>
</tr>
<tr>
<td>Toxic Conc. - LC 50</td>
<td>16,000 ppm/1h (inh-rat)</td>
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</tbody>
</table>
VDX - VDX DRY LUBRICANT SPRAY, AEROSOL

Name: HFC-134a Tetrafluoroethane
Toxic Dose 1 - LD 50: >2085 mg/kg (oral rat)

Other Health Effects:
This substance has no evidence of carcinogenic properties.

Name: Poly-tfe, alpha-chloro-omega
Name: Poly-tfe, omega-hydro-alpha-(methylcyclohexyl)

12 ECOLOGICAL INFORMATION

LC 50, 96 Hrs, FISH mg/l: 450 mg/L
EC 50, 48 Hrs, DAPHNIA, mg/l: 980 mg/L

DEGRADABILITY:
The product is not expected to be biodegradable.

Name: PROPAN-2-OL
LC 50, 96 Hrs, Fish mg/l: 9,640
EC 50, 48 Hrs, Daphnia, mg/l: 5102
IC 50, 72 Hrs, Algae, mg/l: >2,000
Name: HFC-134a Tetrafluoroethane
LC 50, 96 Hrs, Fish mg/l: 450
EC 50, 48 Hrs, Daphnia, mg/l: 980
Name: Poly-tfe, alpha-chloro-omega
Name: Poly-tfe, omega-hydro-alpha-(methylcyclohexyl)

13 DISPOSAL CONSIDERATIONS

WASTE MANAGEMENT:
Waste to be treated as controlled waste. Disposal to licensed waste disposal site in accordance with local Waste Disposal Authority.

DISPOSAL METHODS:
Dispose of waste and residues in accordance with local authority requirements. Empty containers must not be burned because of explosion hazard. Aerosol containers can explode when heated, due to excessive pressure build-up. Recover and reclaim or recycle, if practical.

14 TRANSPORT INFORMATION

NON-FLAMMABLE NON-TOXIC GAS

DOT PROPER SHIPPING NAME: AEROSOLS
TDG SHIPPING NAME: AEROSOLS
ENVIRONMENTALLY HAZARDOUS SUBSTANCE/MARINE POLLUTANT: No.
IDENTIFICATION No.: UN1950
CEFIC TEC(R) NO.: 20G53
DOT HAZARD CLASS: 2.2
DOT PACKING GROUP: N/A
MARKINGS: ORM-D
UN NO. SEA: 1950
IMDG CLASS: 2.2
IMDG PACK GR.: N/A
MFAG: See Subsection 4.2 of MFAG.
UN NO. AIR: 1950
VDX - VDX DRY LUBRICANT SPRAY, AEROSOL

AIR CLASS  2.2
AIR SUB CLASS  N/A
AIR PACK GR.  N/A
TDG PACKING GROUP  N/A

15 REGULATORY INFORMATION

INVENTORIES

<table>
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<tr>
<th>COMPONENT</th>
<th>CAN</th>
<th>US</th>
<th>EU</th>
<th>AUS</th>
<th>JAP</th>
<th>KOR</th>
<th>CHN</th>
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<tr>
<td>PROPAN-2-OL</td>
<td>DSL</td>
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<tr>
<td>HFC-134a Tetrafluoroethane</td>
<td>DSL</td>
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<table>
<thead>
<tr>
<th>COMPONENT</th>
<th>TSCA 12(b) Export Notification</th>
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<tbody>
<tr>
<td>HFC-134a Tetrafluoroethane</td>
<td>No.</td>
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SARA (311/312) HAZARD CATEGORIES
Acute Chronic Pressure

REGULATORY STATUS (US)
TSCA: The ingredients of this product are on the TSCA Inventory.

REGULATORY REFERENCES

WORKPLACE HAZARDOUS MATERIALS INFORMATION SYSTEM -WHMIS

LABEL(S) FOR SUPPLY
Compressed Gas. Materials Causing Other Toxic Effects.

CONTROLLED PRODUCT CLASSIFICATION
Canadian WHMIS Classification A D2B DSL WORKPLACE HAZARDOUS MATERIALS INFORMATION SYSTEM (CPR SECTION (33))
This product has been classified according to the hazard criteria of the Controlled Product Regulations, and the MSDS contains all required information.

16 OTHER INFORMATION

HAZARDOUS MATERIAL INFORMATION SYSTEM (HMIS)

<table>
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<tbody>
<tr>
<td>FLAMMABILITY</td>
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<td>PHYSICAL</td>
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<tr>
<td>PERSONAL PROTECTION</td>
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NATIONAL FIRE PROTECTION ASSOCIATION (NFPA)

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<tbody>
<tr>
<td>INSTABILITY</td>
<td>N/A</td>
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<tr>
<td>SPECIAL</td>
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REVISION COMMENTS
NOTE: Lines within the margin indicate significant changes from the previous revision.
VDX - VDX DRY LUBRICANT SPRAY, AEROSOL

REVISION DATE 19/08/2009
VERSION No. 1

SAFETY DATA SHEET STATUS
Approved.
DATE 08/19/09

DISCLAIMER

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